The NRC's Guidelines for Risk Communication Quick Reference Guide



As the U.S. Nuclear Regulatory Commission (NRC) integrates risk analysis into its regulatory activities, the "agency" must improve risk communication with both internal and external stakeholders to ensure management excellence and openness in the agency's regulatory processes. Risk communication is the essential link between risk analysis, risk management, and the public. In addition, risk analysis and risk management are two essential elements in the NRC's decision-making process.

A primary challenge to effective risk communication is the difference between how the NRC and the public define or perceive risk. The NRC's assessment of risk balances the likelihood of an occurrence against its possible consequences. The public's perception of risk, however, is based on the probability that something bad will happen, compounded by aspects of the situation that they find upsetting. Using

risk information appropriately to reach defensible decisions requires that those involved must have a common understanding of risk-related topics. Even within the agency, however, there are different levels of understanding of risk concepts.

Develop a shared understanding

Creating a shared understanding through meaningful dialogue can bridge the gap between different definitions and perceptions of risk. Skillfully applying consistent, well-planned risk communication practices will help the NRC discuss risk information constructively both inside and outside the agency. The following lists summarize strategic and interpersonal actions for the NRC and its staff to take:

Strategic Level

- Long-term planning
- Coordinated communication efforts
- Strategic partnerships
- Collaborative problem solving
- Consistent messages
- Appropriate communication tools
- Common understanding of risk terms

Interpersonal Level

- Empathetic and active listening
- Caring about the health and safety of others
- Building trust and credibility
- Establishing long-term relationships
- Managing conflict
- Effectively delivering messages
- Sharing expertise and insights

Stakeholders Decision-Makers Staff Risk Communication Others Shared Understanding

Know your stakeholders and their concerns

The foundation of effective risk communication involves understanding both the people and the issues. Identifying your stakeholders and understanding their perspectives are essential steps in making effective use of risk communication resources and developing a risk communication strategy. The NRC's external stakeholders include the media, other government agencies, advocacy groups, elected officials, the regulated community, and individual citizens outside the agency. The interests and concerns of these external stakeholders vary widely. Stakeholders internal to the NRC are grouped into three broad categories of technical, non-technical, and management employees. The interests and concerns of these internal stakeholders are influenced by their roles and responsibilities within the agency, experience with risk information, familiarity with statistics, and technical area of expertise (engineer, health physicist, etc.).

Build the credibility of risk information

Stakeholders' opinions are influenced by trust in the credibility of the available risk information. Competence and expertise are important for building trust and credibility with external stakeholders, but empathy, honesty, and commitment are equally important. Be organized and prepared, communicate openly and honestly, coordinate and collaborate with other credible sources, and follow through on commitments. For internal risk communication, trust and credibility are based on understanding and accepting the risk assessment, and the data and assumptions that go into it. Talk about the strengths and limitations of risk information in terms of potential implications for use. Explain how you concluded that something is not a concern. Provide examples of data sources and assumptions, especially in your stakeholders' areas of expertise.

Develop key messages

- Determine your purpose—to educate, change perceptions, gain consensus, raise awareness, etc.
- Settle on three or four key messages, backed by two to four supporting facts.
- Tailor the language to the audience's level of education, concerns about the issue, experience with risks, and understanding of the underlying science.
- Begin by explaining the important conclusions and summarizing their impacts. Explore the details *after* you provide the summary statement.
- Provide qualitative assumptions underlying the analysis and reasons for the results, not just the numbers.
- Be up-front about the uncertainties, weaknesses, or data gaps in the risk assessment.
- Provide the context to help the stakeholder(s) evaluate a risk in terms of the big picture.
- Internally, explore various risk decision-making options, discuss the implications of each option, and provide information that will help management explain decisions.
- Internally, relate the risk assessment and outcomes to the agency's strategic goals.
- Externally, highlight the NRC's principles of regulation and our role in ensuring nuclear safety.

Communicate technical information in a manner that is understandable and relevant

- Don't use technical terms that dehumanize people. Distant, abstract, and unfeeling language about death, injury, and illness sends the message that you don't care about people as individuals.
- Transform scientific notation into familiar units of measure.
- Use simple, focused graphics to reinforce your key messages.
- Use analogies and stories to illustrate technical information.
- Use comparisons to put risks in perspective, but be careful. It may appear manipulative to compare the risks of living near a nuclear power plant to lifestyle choices or other risks that the public voluntarily assumes.
- Indiscriminate use of risk comparisons may be detrimental to your credibility.
- Be prepared for skepticism. People are naturally uncomfortable with new approaches to safety evaluation using risk information.
- Present the results in relation to some established standard or typical result.
- Decide on the appropriate level of detail to present.
- Explain key assumptions behind the model and how those assumptions affect results in both directions.
- Explain how the data from different disciplines fit into the risk assessment, as well as how the expertise from those disciplines is considered as input into the final result.
- Ask your audience to examine the model to test whether it accurately reflects their knowledge and experience.

Implement effective two-way communication to anticipate and deal with controversy

- Listen. Uncovering the concerns and feelings of others can be instrumental in creating solutions that are acceptable to everyone involved.
- Admit the problem. It's difficult to identify solutions if people deny that a conflict exists.
- Acknowledge the frustration of people who express high levels of concern, and be sure to remain respectful at all times.
- Remain calm and do not respond to verbal attacks with emotional retorts.
- Refute misinformation succinctly and without becoming confrontational.
 Avoid negative language.
- If necessary, delegate meeting leadership to a third-party facilitator.
- Arrange a time and place to discuss the issue. This can be an informal conversation or a group meeting.
 Do not rely on electronic communication to resolve the conflict.
- Allow adequate time to talk through the issue.
- Include everyone who is involved, interested, or likely to be affected. Leaving a person or group "out of the loop" may create additional conflict.
- Be flexible and open to new ideas and ready to suggest possible solutions.

Responding to Difficult Questions

- Allow ventilation.
- Determine the underlying concern.
- Express empathy.
- Deliver your conclusion.
- Provide supporting facts.
- Repeat your conclusion.
- Propose future action.